



**State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES**

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Dr. Stanley Yarosewick, President
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**LETTER OF DEFICIENCY
WD WWEB/C 01-12
December 7, 2001**

Subject Unauthorized discharge investigation at Keene State College in Keene, NH

On November 7, 2001, a representative from the New Hampshire Department of Environmental Services (DES) conducted a complaint investigation concerning two unauthorized discharges at Keene State College (KSC). Specifically, this investigation concerned boiler and floor drain discharges to the Ashuelot River through the KSC storm water drainage system. The following people were present during this investigation.

Lenane Butler, Environmental Health and Safety Specialist, KSC
Bill Rymes, Heating and Plumbing Supervisor, KSC
Mike Fuller, Mechanic, KSC
Kendall Perkins, Environmental Inspector, DES

DES conducted this investigation during dry weather. DES noted the following deficiencies during this investigation:

1 - The KSC Heat Plant contains three boilers that frequently discharge boiler blowdown to an adjacent storm water catch basin. The storm water catch basin is connected to the Ashuelot River via the KSC storm water drainage system.

KSC is not permitted to discharge boiler blow-down or any other type of process water to the storm water catch basin. As per our conversation during this investigation, KSC will connect this discharge to a sanitary sewer line in the basement of the Heat Plant. Redirecting the boiler discharges to the sanitary sewer is an acceptable response to this issue. However, prior to making this connection, KSC should seek permission from the City of Keene (the City) for this discharge to the City's wastewater treatment plant.

2 - Floor drains in the Whitcomb Garage are connected to a brick lined sump located outside the Whitcomb Garage. This sump is connected to the Ashuelot River via a drainpipe that allows the sump to discharge when the liquid in the sump reaches a certain level. The sump also collects roof drain water from the Whitcomb Garage.

KSC is not permitted to discharge floor drains to the Ashuelot River. Please also understand that, the New Hampshire Code of Administrative Rules Env-Ws 1500 prohibits the use of ground discharging floor drains in areas where regulated contaminants are used or stored. There are three options for the Whitcomb Garage floor drains: 1) permanently eliminate the floor drains; 2) reroute the floor drains to a

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municipal sanitary sewer; or 3) reroute the floor drains to an intrinsically sound holding tank with a level alarm. Mitchell Locker of DES' Underground Injection Control Program has been made aware of this issue. KSC should contact Mr. Locker at 271-3503 for more information concerning DES' Underground Injection Control Program rules.

DES made the following observations during this investigation

3 – In addition to the frequent boiler discharges from the Heat Plant (referenced in Item #1), KSC reportedly washes down an area to the storm drain after ash is cleaned from the boilers. KSC attempts to retain solids from the wash water before releasing the water to the storm drain. Please understand that this wash water is considered process water and KSC is not permitted to discharge this, or any, process water to the storm drain. KSC should make every effort to minimize or eliminate pollutants from storm water.

4 – During this investigation, DES noted that a copper pipe, approximately 2" in diameter, ended in a storm water catch basin located at the intersection of Blake Street and Student Center Drive (across Blake Street from Delta Phi Epsilon). KSC personnel were unsure as to the origin of this pipe at the time of this investigation.

5 – During this investigation, DES observed a concrete pipe, approximately 24" in diameter, discharging (approximately 0.25 gallons per minute) to the Ashuelot River. This pipe is located along the Ashuelot River bank behind Carle Hall. KSC personnel were unsure as to the origin of this pipe, and related discharge, at the time of this investigation.

6 – During this investigation, DES observed a discharge pipe, approximately 36" in diameter, discharging cloudy water to the Ashuelot River. This pipe is located on the right hand side (facing the river) below the scenic overlook between Joyce Field and the Spaulding Gym parking lot. The flow from this pipe was causing a slight plume in the Ashuelot River. Subsequent turbidity tests revealed that the discharge was not causing a violation of the New Hampshire Surface Water Quality Standard for turbidity at the time DES collected the sample. KSC personnel were unsure as to the origin of this pipe, and related discharge, at the time of this investigation.

Based on the November 7, 2001 observations, DES is concerned that KSC may have additional unpermitted discharges to the State's surface waters which is a violation of state and federal law. To insure that only storm water and ground water are conveyed via the storm water drainage system, DES requests that KSC perform a comprehensive evaluation of the KSC storm water drainage system (CESW). The CESW should include, but not be limited to, the sources of discharges and pipes noted in items 4-6 above.

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DES believes that KSC can eliminate the boiler and floor drain discharges (items 1 and 2 above) and requests that KSC respond by **January 15, 2002** with detailed plan and schedule for compliance. DES also requests that KSC submit a CESW plan by **January 15, 2002**. Please send the written response to DES/WD-WWEB, Attention: Kendall Perkins, P.O. Box 95, Concord, NH 03302-0095. In the event that DES does not receive an adequate response by the above date, DES or EPA may initiate further State and/or Federal action. Further action may include issuing an administrative order, initiating an administrative fine proceeding and/or seeking civil or criminal penalties.

The deficiencies identified in this report are those that Kendall Perkins observed during the November 7, 2001 investigation. KSC remains responsible for complying with all applicable requirements, whether found in statutes, rules, or applicable permit(s), regardless of whether DES identified violations of the requirements during this or any other inspection.

Sincerely,

COPY

John R. Bush, P.E.

Administrator

Wastewater Engineering Bureau

cc:

Gretchen Rule, DES Enforcement Coordinator

Joy Hilton, USEPA Compliance Section

Eric Swope, Pretreatment Program, City of Keene

Sharon Ducharme P.E., Enforcement Supervisor, DES, WD, WWEB

Russ Nylander, P.E., Chief Engineer, DES, WD

Mitchell Locker, UIC Coordinator, DES

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